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UNITED STATES DEPARTMENT OF AGRICULTURE — Radio Service — OFFICE OF INFORMATION

HOUSEKEEPERS' CHAT Tuesday, March 15, 1938

(FOR BROADCAST USE ONLY)

Subject: "QUESTIONS AND ANSWERS." Information from the Office of Experiment Stations, United States Department of Agriculture.

--ooOoo--

Our letter box still holds a good many questions about the kitchen range -- and the pots and kettles that cook on it. So let's dedicate today to cook-stove questions and answers.

Here's one from a listener who is about to buy a new gas stove. She wants information about the broiler of the stove. The broiler in her old stove was so poor, she says, that she gave up ever trying to cook a steak or any other broiled food. Before she puts her money down on a new stove, she wants to be sure of the broiler.

This listener will be interested in what Arnold Baragar of the Nebraska Experiment Station has to say about broilers on gas stoves. (Mr. Baragar has recently finished a special study of gas stoves.) He says that most broilers take their heat from the oven burner. And of these the most convenient are the ones with a broiler compartment of the drawer type with a door that drops down. The drawer arrangement lets you pull the broiler out away from the flame so you can turn the steak over without burning your hands. Some other stoves have a separate burner for the broiler and a swinging door which brings the pan out as it opens. Either of these two arrangements are convenient.

Mr. Baragar advises that the broiler pan should be of enamel or aluminum or chromium plate and that it should be of the non-inflammable, non-spattering type. Such a pan has a semisolid rack that prevents the grease from spattering and catching fire. One other point to notice about a broiler is whether it is easy to clean. (Now and then you find a stove with broiler parts that don't move so are next to impossible to clean.)

Briefly then, the 4 main points to check on if you want a good broiler are: first, a drawer or swinging-door arrangement that brings the broiler out away from the heat when you want to turn the food over; second, a pan of enamel, chromium or aluminum; third, a rack that prevents the grease from spattering or catching fire; and, fourth, a broiler with movable parts that make it easy to clean.

That reminds me of another question. Another listener writes: "How can I tell before buying a stove whether it will be easy to clean?"

Answer: Look at the joints, inside corners, finish and movable parts. Notice whether there are many cracks and corners that will easily collect grease and food yet be hard to reach and clean. Also notice whether the pipes and gas cocks at the top of the stove are protected from spattering grease. Mr. Baragar says that all parts of the top and oven and broiler -- all parts like burners, linings, oven bottoms and rack slides should be easy to reach and preferably movable.

Here is a complaint from a housekeeper who has just changed from a coal stove to a new gas range. She says she has a big family to feed, so often needs to have several large kettles cooking on top of the stove at the same time. But her new gas range won't accommodate that many large kettles without pushing them off-center where they won't cook so well.

Now that the stove is already purchased, there's not much to do about it. But this is another point well worth considering before you buy a stove -- the size of the cooking top. Mr. Baragar reports that most of the cooking tops you find on gas stoves today are not arranged to take care of several large kettles though they are all right for, say, four small utensils. He says that if you try to use several kettles measuring 9 inches across the bottom, you will have to crowd them so much that some will not be directly over the gas burners. Beside being inconvenient, that means the loss of a good deal of heat.

The solution for a large family or for the cook who uses large kettles is a stove with what the manufacturers call a "divided top", rather than one with the burners all close together. A divided top has 2 burners at either end and a flat metal surface in between that gives extra room for the kettles.

Now a question about economical pots and kettles. "Please tell me," writes a thrifty housekeeper -- "Please tell me which kind of saucepan saves fuel in cooking."

This questioner doesn't say what kind of fuel she uses, whether it is gas or electricity or what. And the fuel makes some difference in choosing cooking utensils. But in general the pan that saves both gas and electricity is the one that absorbs and holds heat the best. Such a pan has a flat bottom wide enough to cover the gas grate or the electric heating unit. It has a straight up-and-down rather than flaring sides. And it has a close-fitting cover. (Mr. Baragar says that enamelware is less likely to have tight covers than aluminum or other metals.) A tight cover helps hold in the heat -- helps prevent loss by evaporation.

As for the material and finish of the kettle, a study at the Iowa Station showed that enamelware, copper and black-bottom aluminum pans were just about equal in cooking efficiency but that the natural-finish aluminum was slightly less efficient especially on some burners. So now, if you have an electric stove, an aluminum pan with a black bottom may be a saving of time and fuel in cooking. But on enamelware a black-bottom is of no advantage.

One last little question -- about the tea-kettle versus the covered saucepan. A listener wants to know whether she saves electricity by heating water in a tea-kettle or in a stew-pan.

Answer: It seems to be 6 to one and half a dozen to the other, as the old saying goes. The Iowa study showed that teakettles and covered pans of the same material and size required practically the same time for heating water.